REMARKS/ARGUMENTS

Favorable reconsideration is respectfully requested in view of the above amendments and the following discussion.

The drawing has been objected to because the sheets of drawing are not numbered. Although numbering of the sheets of drawing is not a requirement, replacement sheets are submitted herewith and are numbered in order to obviate the objection.

Claims 1 through 11 have been objected to as being unclear with respect to whether or not the fixation pin, set forth in the preamble of claim 1, is being claimed in combination with the instrument for gripping and extracting the fixation pin from the bone in which the fixation pin is embedded. It is respectfully submitted that the claims clearly set forth an instrument and are not intended to claim the fixation pin as a positive element of the claimed combinations. Claim 1 sets forth "An instrument for ... the instrument comprising:" The intervening recitation of a fixation pin embedded in bone sets forth the context within which the instrument is utilized and assists in understanding the manner in which the instrument operates, and is not intended to include the fixation pin as a positive element of the claimed combination. Accordingly, as indicated by the Examiner, correction is not required.

Claims 1 through 11 have been rejected under 35 U.S.C. 102(b) as being anticipated by Dupuis (US Patent 4,028,790). The claims havebeen amended and reduced in number.

While the Dupuis tool does appear to grip and pull upon a pin without relying upon a head or some other lateral structure of the pin, the entire arrangement of parts and the operation of the Dupuis tool differ completely from the instrument of the present invention. Thus, the Dupuis tool has a main body (10) which carries a fixed handle (20) and a movable handle (16) pivotally mounted (at 15) on the fixed handle (20). The movable handle (16) is coupled to a pin gripping member (31) which slides up and down within a bottom portion (11) of the main body (10), the bottom portion (11) and the fixed handle (20) being an integral structure. The gripping member (31) is bifurcated to form two members (35) having serrated inner surfaces (36) and tapered outer surfaces (37). In operation, the tool is positioned over the pin to be pulled, with the pin received between the serrated surfaces (36) of the two members (35) of the gripping member (31), and the handles 16 and 20 are squeezed together to raise the gripping member (31). As explained in the reference (at column 3, lines 42-45), the clearance between the serrated surfaces (36) is such that there is an initial friction between the serrations and the pin on initial positioning of the tool over a pin. Without that initial frictional engagement, the tool would be inoperative since there must be some resistance which enables the gripping member (31) to move upward relative to the tubular member (30) and thereby slide along the tapered bore in the bush (38) at the lower end of the tubular member (30) to force the two members (35) into frictional

gripping engagement with the pin. Otherwise, nothing would prevent the tubular member (30) and the gripping member (31) from moving as a unit, without gripping the pin at all. Hence, the gripping mechanism relies upon an initial frictional engagement between the gripping member (31) and the pin. Moreover, the tool relies upon the grip of the pin in the board to establish a reaction force which will, in turn, establish the force with which the pin is gripped (column 3, lines 21-27). This same reaction force keeps the lower end (43) of the body member against the board in which the pin is embedded (column 3, lines 27-29). Once the pin is pulled from the board, the pin is released selectively from the tool by actuating a cam lever (40) which raises the gripping member (31) relative to the tubular member (30) until the pin is released from the two members (35)(column 3, lines 37-39).

In contradistinction, the instrument of the present invention establishes a positive gripping force on an embedded pin, independent of any initial frictional forces and any forces holding the pin embedded in the bone. In short, the mechanism is entirely different from that of the Dupuis tool and the operation likewise is entirely different. As set forth in the present claims, the gripping mechanism has a first gripping element which includes a gripping surface integral with the first handle member, the second gripping element includes a gripping finger mounted upon the first handle member for movement toward and away from the gripping surface, and a

linkage system couples the second handle member with the gripping finger for movement of the gripping finger laterally toward the gripping surface in response to movement of the second handle member from the first position toward the second position of the second handle member. That combination of elements assures that the pin is gripped firmly and in a positive manner before the pusher is urged against the bearing surface to move the gripping mechanism away from the bearing surface and establish the extraction force necessary to withdraw the pin from the bone.

Unlike the gripping arrangement in the Dupuis tool, which relies upon an initial frictional engagement with the pin, and a reaction to the force with which the pin must be pulled for extraction, before a gripping force can be established, the present gripping mechanism establishes an appropriate gripping engagement independent of such an initial frictional force, and independent of the force necessary to pull the pin from the bone, and can accommodate variations in pin diameter without slippage and without a failed grip. Dupuis discloses a collet-like arrangement in which axial sliding of the gripping members relative to the actuating handles is necessary in order to establish a grip upon the pin. The mechanism of the present claims employs a gripping finger which is moved toward a gripping surface integral with the first handle member to create a clamping action which positively clamps the pin within the instrument, independent of any reaction force created by the force required to

pull the pin from the bone, prior to exerting an extraction force which pulls the pin from the bone. As compared to Dupuis, the action is positive and certain, independent of variations in pin diameter, the necessity for initial frictional engagement between the instrument and the pin, and a reaction force created by the required extraction force. Dupuis neither discloses nor suggests the combination of elements set forth in the present claims, and the manner in which the claimed combination of elements operates to extract a pin. Accordingly, it is respectfully requested that the rejection based upon Dupuis be withdrawn.

The remaining newly cited references have been reviewed and are deemed to add nothing by way of anticipation or rendering obvious the subject matter of the present claims.

It is respectfully submitted that the subject matter of the present claims is neither anticipated nor rendered obvious by the disclosures of the cited references and it is respectfully requested that the claims be allowed and the application be passed to issue.

Respectfully submitted,

Arthur Jacob
Registration No. 19,702
Attorney for Applicants

25 East Salem Street
P.O. Box 686
Hackensack, New Jersey 07602
Telephone : (201) 488-8700
Fax : (201) 488-3884
E-mail : ideas@arthurjacob.com